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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,734	02/28/2005	Shintarou Mikami	FP3002-0035	2556
39083 7590 05/15/2008 CERMAK KENEALY & VAIDYA, LLP 515 EAST BRADDOCK RD SUITE B Alexandria, VA 22314				
EXAMINER				
BUMGARNER, MELBA N				
ART UNIT		PAPER NUMBER		
3732				
MAIL DATE		DELIVERY MODE		
05/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/525,734

Applicant(s)

MIKAMI ET AL.

Examiner

Melba Bumgarner

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 1/24/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 18 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not describe the feature of "the entire brush portion is spaced from the light emitting axis" and it is not apparent in figure 2.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by "a back surface of the head portion," "surfaces of the elastic portion" and "surfaced of respective light transmitting portions" with respect to the brush surface, opposed surface, side surface and at least a surface. Recitation of "the outer peripheries of the sides" in claim 4 lacks sufficient antecedent basis.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 6, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisio, Jr. (5,813,855) in view of Solanki (6,886,207). Crisio, Jr. discloses a toothbrush 10 comprising a head portion 16 with a brush portion located on a brush surface, a toothbrush body 14, and a shaft 12 that connects the head portion and the body, the head portion including an opposed surface that is directly opposed to the brush surface and a side surface that is located between and spaces the opposed surface from the brush surface, the body being provided with light emitting means to irradiate light toward the head portion, the shaft being structure to permit the light to transmit along a longitudinal axis of the shaft, a tip end of the head portion provided with a tip-end light transmitting portion that intersects with the longitudinal axis and configured to transmit light from the means outside of the head portion; however, Crisio, Jr. does not show a surface of the head portion including an elastic portion. Solanki teaches a toothbrush having at least a surface of the head portion including an elastic portion 8, the elastic portion being relatively more elastic than the head portion, and located at least at a part of the side surface and defining an opening in the elastic portion at a location that intersects with the longitudinal axis (figure 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the toothbrush of Crisio, Jr. with the elastic portion of Solanki in order to provide massaging elements in view of Solanki. The brush surface of the head portion on which the brush portion is provided does not include the elastic portion forming a brush-portion light transmitting portion and at least a part of the opposed surface does not include the elastic portion providing a back-surface light transmitting portion. Solanki show elastic body

formed from a transparent material (column 4 line 19). The light emitting means irradiate light along a light emitting axis, and the brush portion is spaced from the axis and it would have been an obvious matter of choice to one of ordinary skill in the art as to having the entire brush portion spaced from the axis.

7. Claims 1-4, 6, 10-13, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisio, Jr. in view of Inns et al. (5,970,564). Crisio, Jr. discloses a toothbrush 10 comprising a head portion 16 with a brush portion located on a brush surface, a toothbrush body 14, and a shaft 12 that connects the head portion and the body, the head portion including an opposed surface that is directly opposed to the brush surface and a side surface that is located between and spaces the opposed surface from the brush surface, the body being provided with light emitting means to irradiate light toward the head portion, the shaft being structure to permit the light to transmit along a longitudinal axis of the shaft, a tip end of the head portion provided with a tip-end light transmitting portion that intersects with the longitudinal axis and configured to transmit light from the means outside of the head portion; however, Crisio, Jr. does not show a surface of the head portion including an elastic portion. Inns et al. teach a toothbrush having at least a surface of the head portion including an elastic portion 6, the elastic portion being relatively more elastic than the head portion, and located at least at a part of the side surface and defining an opening in the elastic portion at a location that intersects with the longitudinal axis (figure 9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the toothbrush of Crisio, Jr. with the elastic portion of Inns et al. in order to provide a massaging effect to the teeth and/or gums in use in view of Inns et al. The brush surface of the head portion on which the brush portion is provided does not include the

elastic portion forming a brush-portion light transmitting portion and at least a part of the opposed surface does not include the elastic portion providing a back-surface light transmitting portion. The elastic portion is formed on at least a substantially central region of the opposed surface except on the back-surface light transmitting portion. As understood, the back-surface light transmitting portion is formed to have a cross section curved from an outer periphery of a back surface (figure 6). Inns et al. show the elastic body formed of transparent material (column 4 line 23). The elastic portion includes a side portion located along the side surface and a central portion located a substantially central portion of the opposed surface and defining an opening in the elastic portion extending about the central portion. The light emitting means irradiate light along a light emitting axis, and the brush portion is spaced from the axis, and it would have been an obvious matter of choice to one of ordinary skill in the art as to having the entire brush portion spaced from the axis.

8. Claims 1, 5, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisio, Jr. in view of Raven et al. (5,991,959). Crisio, Jr. discloses a toothbrush 10 comprising a head portion 16 with a brush portion located on a brush surface, a toothbrush body 14, and a shaft 12 that connects the head portion and the body, the head portion including an opposed surface that is directly opposed to the brush surface and a side surface that is located between and spaces the opposed surface from the brush surface, the body being provided with light emitting means to irradiate light toward the head portion, the shaft being structure to permit the light to transmit along a longitudinal axis of the shaft, a tip end of the head portion provided with a tip-end light transmitting portion that intersects with the longitudinal axis and configured to transmit light from the means outside of the head portion; however, Crisio, Jr. does not show a

surface of the head portion including an elastic portion. Raven et al. teach a toothbrush having at least a surface of the head portion including an elastic portion 6, the elastic portion being relatively more elastic than the head portion, and located at least at a part of the side surface and defining an opening in the elastic portion at a location that intersects with the longitudinal axis (figure 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the toothbrush of Crisio, Jr. with the elastic portion of Raven et al. in order to prevent damage of the teeth or surrounding soft tissue due to excessive force or brushing frequency in view of Raven et al. Raven et al. show an embodiment having the elastic portion including a shaft elastic body on the shaft in the vicinity of the head portion and a surface of the shaft not including the elastic body (figure 16). The light emitting means irradiate light along a light emitting axis, and the brush portion is spaced from the axis, and it would have been an obvious matter of choice to one of ordinary skill in the art as to having the entire brush portion spaced from the axis.

9. Claims 7-9 and 14-17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Crisio, Jr. in view of Inns et al. and further in view of Raven et al. The modified toothbrush of Crisio, Jr. and Inns et al. shows the limitations as described above; however, they do not show the elastic portion including a shaft elastic body on the shaft. Raven et al. show an embodiment having the elastic portion including a shaft elastic body on the shaft in the vicinity of the head portion and a surface of the shaft not including the elastic body (figure 16). It would have been obvious to one having ordinary skill in the art to further modify the toothbrush to have the shaft elastic body in order to further encase portion of the shaft with elastic material and provide surface to prevent damage of teeth and soft tissue.

Response to Arguments

10. Applicant's arguments filed April 18, 2008 have been fully considered but they are not persuasive. The combination with secondary references teaching the elastic portions would not interfere with the illumination purpose of Crisio, Jr. in the same manner as the claimed invention, since the "openings" or uncovered portions in the head portion permit transmission of irradiating light. Furthermore, if the material of the elastic portion(s) is transparent, it would not significantly interfere as well.

Information Disclosure Statement

11. In the information disclosure statement filed January 24, 2008, listed non-patent literature document has been placed in the application file, but the information referred to therein has not been considered. It is suggested that Applicant file the Chinese patent application and include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information.

Conclusion

12. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriquez can be reached at 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Melba Bumgarner/
Primary Examiner, Art Unit 3732